

Title (en)
CANCER-RELATED ACTIVITY SENSORS

Title (de)
SENSOREN FÜR KREBSBEDINGTE AKTIVITÄT

Title (fr)
CAPTEURS D'ACTIVITÉ ASSOCIÉS AU CANCER

Publication
EP 4139470 A4 20240522 (EN)

Application
EP 21792071 A 20210423

Priority
• US 202063015340 P 20200424
• US 2021028794 W 20210423

Abstract (en)
[origin: US2021333283A1] An activity sensor sensitive to enzymes indicative of the presence of cancer is used to provide non-invasive reporting of tumor development and response to anticancer therapies useful in determining suitability and effectiveness of various treatments including immuno-oncological therapies. Localized reporters are used in patient stratification in clinical trials, monitoring of drug response or disease progression, and differentiating between anti-tumor immune response, tumor progression, and off-target immune response. Activity sensors may include tuning domains to modulate tissue localization and residency. Periodic measurements of activity sensor reporters may be analyzed to determine a velocity value indicative of disease prognosis.

IPC 8 full level
C12Q 1/00 (2006.01); **A61K 47/10** (2017.01); **A61P 35/00** (2006.01); **C12Q 1/37** (2006.01); **G01N 33/574** (2006.01)

CPC (source: EP US)
C12Q 1/37 (2013.01 - EP); **G01N 33/54353** (2013.01 - EP); **G01N 33/574** (2013.01 - EP); **G01N 33/58** (2013.01 - EP US); **G01N 2333/95** (2013.01 - US); **G01N 2800/52** (2013.01 - US); **G01N 2800/56** (2013.01 - US); **G01N 2800/7028** (2013.01 - EP)

Citation (search report)
• [X] WO 2019075292 A1 20190418 - MASSACHUSETTS INST TECHNOLOGY [US]
• [X] CA 3103079 A1 20191212 - GLYMPSE BIO INC [US]
• [A] ZLOBOVSKAYA O A ET AL: "Sensors for Caspase Activities", RUSSIAN JOURNAL OF BIOORGANIC CHEMISTRY, PLEIADES PUBLISHING, MOSCOW, vol. 44, no. 6, 22 February 2019 (2019-02-22), pages 645 - 652, XP036709996, ISSN: 1068-1620, [retrieved on 20190222], DOI: 10.1134/S1068162018060109
• See also references of WO 2021216968A1

Designated contracting state (EPC)
AL AT BE BG CH CY CZ DE DK EE ES FI FR GB GR HR HU IE IS IT LI LT LU LV MC MK MT NL NO PL PT RO RS SE SI SK SM TR

DOCDB simple family (publication)
US 2021333283 A1 20211028; CA 3181048 A1 20211028; CN 115720593 A 20230228; EP 4139470 A1 20230301; EP 4139470 A4 20240522; JP 2023523320 A 20230602; WO 2021216968 A1 20211028

DOCDB simple family (application)
US 202117238585 A 20210423; CA 3181048 A 20210423; CN 202180045269 A 20210423; EP 21792071 A 20210423; JP 2022565577 A 20210423; US 2021028794 W 20210423